

The logo for the SET PLAN Conference 2015 is contained within a white right-angled triangle. The triangle is outlined in a thin blue line. The text 'SET PLAN' is in a large, bold, black sans-serif font. Below it, 'Conference' is in a smaller, regular black sans-serif font, and '2015' is in the same size as 'Conference'.

**SET
PLAN**
Conference
2015

Research, innovation
and competitiveness
for the Energy Union

ENERGY EFFICIENCY IN BUILDINGS

Monica Frassoni

President of the European Alliance to Save Energy
(EU-ASE)

SESSION 5

Efficient energy systems
Tuesday 22 September 2015

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EUROPEAN ALLIANCE TO SAVE ENERGY (EU-ASE)

- EU-ASE was established in December 2010 by some of Europe's leading multinational companies. The Alliance creates a platform from which our companies (1E, Danfoss, Ingersoll Rand, Kingspan, Knauf Insulation, Opower, Philips, Schneider Electric and Siemens) can join with politicians and thought leaders to ensure the voice of energy efficiency is heard from across the business and political community.
- EU-ASE members have operations across the 28 Member States of the European Union, employ over 150.000 people in Europe and have an aggregated annual turnover of €70 billion.



The technology challenges for energy efficiency

- ❑ European companies have the technology TODAY to deliver a 20% energy savings target by 2020.
 - In the area of insulation the technologies already exist to make buildings near zero energy and are already highly cost effective. By combining energy efficiency solutions in existing buildings, the construction industry could save 32% of its total primary energy use in existing buildings (€260 billion a year).
 - The direct savings that could be reaped through a deep implementation of lighting technologies could reach €28 billion per year.
 - The ICT sector in energy efficiency could save €20 billion a year.
 - Smart grid technologies alone can achieve 25-50% of the 20% energy savings target.

- ❑ The improvement is however possible and it represents a much more important challenge.
 - The major challenge for both new build and renovation is the building chains ability to take up new technologies and to improve the implementation of these technologies and services.

- ❑ The biggest challenge is around **renovation**.
 - What the industry really needs is not a technology road map, but the belief that Governments are serious about renovation and creating a market. The industry has strong capacity for product innovation for renovation, but this will only be funded when it becomes clear that Governments are serious about renovation.
 - It is essential to have a long-term EU legislative framework, through the revision of EPBD and EED, that creates a real renovation market.

The EU's competitive position in energy efficiency

- ❑ The EU must maintain its predominant market share in the segment of energy efficiency (which amount to 27% for the EU, while China is 23% and US is 20%) and keep its role as the world's most important market for energy efficiency (accounting for around 40% of global investments in energy efficiency).
- ❑ The EU cannot risk trillions of euros in outdated investment priorities and lagging behind compared to its global competitors, it must boost clean-energy investments through **binding EU target and legislation**.
 - The three largest global players in the insulation industry are all EU players and some of the most promising new comers are also EU based. They have been supported by strong development of new build codes. What is needed is to build on this success by being the first region to make a serious effort to renovate buildings.
 - The main driver to foster a behavioural energy efficient market is having in place a well-designed energy efficiency obligation, as the one defined by art. 7 EED, that acknowledges savings achieved through behavioural changes. This is already happening in the United States. Momentum for behavioural energy efficiency is building across Europe: Denmark, Ireland and Italy have approved behavioural programmes (also referred to as energy 'feedback mechanisms') as an accredited energy efficiency approach. However, Europe's behavioural energy efficiency potential remains largely untapped.

The societal impact and the impact on consumers

- ❑ Today billions of euros flow out of Europe to pay for the energy that we waste, a waste made more shocking by the fact that TODAY all the technology exists to practically eliminate this waste.
- ❑ The impact of energy efficiency is not solely limited to reduction in energy usage. Energy efficiency generates **multiple benefits** for various stakeholders in society, with relevant implications for long-term economic development:
 - Economic growth & Job creation
 - Return on public spending & Net savings to support financing for investments in energy infrastructures
 - Consumer surplus & Improved asset values
 - Improved health, wellbeing and social development
 - Lower energy prices and energy affordability
 - Increased energy security
 - Decarbonization
 - Energy productivity and competitiveness
- ❑ ...but it is not only a question of technologies and services: **consumers need to be empowered.**
 - Consumers need better information and personalized insights about their energy consumption, in order to change their behaviour and achieve energy savings in the most cost-effective ways. Deploying behavioural efficiency programmes everywhere are cost-effective and would save European utility customers 12 terawatt-hours (TWh) of energy, 3.3 million tonnes of carbon-dioxide equivalent (CO₂e), and €2.4 billion every year.

How to promote investment in energy efficiency?

- ❑ Investment in energy efficiency is of strategic importance for the EU since it is a cost effective manner to reduce the EU's reliance, and expenditure, on energy imports over €400 billion a year.
- ❑ But **market barriers**, which hinder such investments, exists and need to be overcome.
- ❑ Such barriers have ALREADY been identified and recommendations outlined in the final report by the Energy Efficiency Financial Institution Group (EEFIG) published on 26 February 2015:
 - Energy performance certificates of buildings should be improved;
 - Funds for energy efficient investments at EU and national level should be streamlined;
 - Energy and cost database for buildings should be created;
 - A project rating system to provide a transparent assessment of the technical and financial risks of energy renovation projects for buildings should be developed;
 - Barriers to expanding the green mortgage market should be addressed and the current State Aid rules should be reviewed;
 - Etc...



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Monica Frassoni
President
European Alliance to Save
Energy (EU-ASE)

monica.frassoni@euase.eu

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myenergy
Luxembourg



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Ministère de l'Économie



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